VGN-TX50B/TX70PZ/TX90PS/TX90S
VGN-TX610P/TX630P/TX650P/TX651P/TX670P/TX690P
VGN-TX1HP/TX1XP/TX1XRP
VGN-TX15C/TX16C/TX16GP/TX16SP/TX16TP/TX17C/TX17GP/TX17TP

SERVICE MANUAL

Ver 3-2005J

Revision History

Area	Model	Lineup	
Japanese	Japanese	VGN-TX50B/B VGN-TX70PZ VGN-TX90PS VGN-TX90PS* VGN-TX90S*	⚠ [MA]
American	US/Canadian	VGN-TX610P/B VGN-TX630P/B VGN-TX650P/B VGN-TX651P/B VGN-TX670P/B VGN-TX670P/W VGN-TX690P/L	⚠ [MA] ⚠ [MA] ⚠ [MA] ⚠ [MA] ⚠ [MA] ⚠ [MA]
European	AEP/UK	VGN-TX1HP/W VGN-TX1XP/B VGN-TX1XP/L VGN-TX1XRP/B	⚠ [MA] ⚠ [MA] ⚠ [MA] ⚠ [MA]
Asian/ Oceania/ South Africa	International	VGN-TX16GP/W VGN-TX17GP/B VGN-TX17GP/W	⚠ [MA] ⚠ [MA] ⚠ [MA]
	Chinese	VGN-TX15C/W VGN-TX16C/B VGN-TX16C/W VGN-TX17C/B VGN-TX17C/L	⚠ [MA] ⚠ [MA] ⚠ [MA] ⚠ [MA] ⚠ [MA]
	Taiwan	VGN-TX16TP/W VGN-TX17TP/B	⚠ [MA] ⚠ [MA]
	Thai	VGN-TX16SP/W	⚠ [MA]

*: CTO model

9-876-428-03

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S400 MEMORY STICK WiFi CERTIFIED Bluetooth

VAIO

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- 本機の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

PERSONAL COMPUTER

SONY

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Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

CAUTION: The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100°C (212°F) or incinerate.
Dispose of used battery promptly.
Keep away from children.

CAUTION: Changing the back up battery.
- Overcharging, short circuiting, reverse charging, multilation or incineration of the cells must be avoided to prevent one or more of the following occurrence; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any rotection.

CAUTION – CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO THE BEAM.

Service and Inspection Precautions

1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify areas requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the ⚠ mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270°C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

ATTETION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!
LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉSDANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

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History of the changes is shown as the "Revision History" at the end of this data.

変更履歴は、" Revision History " として、本データ末に記載してあります。

CHAPTER 1.
SPECIFICATIONS

1-1. Specifications

	J					AM			
Model	VGN-TX50B/B	VGN-TX70PZ	VGN-TX90PS (28199012)	VGN-TX90PS*	VGN-TX90S*	VGN-TX690P/L	VGN-TX670P/B	VGN-TX670P/W	VGN-TX650P/B
CPU	ULV-CelM/Do/383/1GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz or ULV-CelM/Do/383/1GHz	ULV-PM/Do/753/1.20GHz or ULV-CelM/Do/383/1GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz
Chipset	Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS
Graphics	Integrated	Integrated	Integrated	Integrated	Integrated	Intel 915 GMS Integrated	Intel 915 GMS Integrated	Intel 915 GMS Integrated	Intel 915 GMS Integrated
LCD	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR
HDD	60GB	40GB	60GB	40GB or 60GB or 80GB	40GB or 60GB or 80GB	60GB	60GB	60GB	60GB
Memory Std	512MB on-board	512MB on-board	1GB(512MB on-board+512MBx1)	512MB on-board or 1GB(512MB on-board+512MBx1) or 1.5GB(512MB on-boardx1+1GBx1)	512MB on-board or 1GB(512MB on-board+512MBx1) or 1.5GB(512MB on-board+1GBx1)	1.5GB(512MB on-board+1GBx1)	1GB(512MB on-board+512MBx1)	1GB(512MB on-board+512MBx1)	512MB on-board
Memory Max	1.5GB	1.5GB	1.5GB	1GB(+512MB), 1.5GB(+1GB)	1GB(+512MB), 1.5GB(+1GB)	1.5GB(+1GB)	1GB	1GB	1GB
Optical	SuperMulti/9.5/x4/+DL	Combo/9.5/x24	SuperMulti/9.5/x4/+DL	SuperMulti/9.5/x4/+DL or Combo/9.5/x24	SuperMulti/9.5/x4/+DL or Combo/9.5/x24	DVD+-RW/9.5/x4/+DL	DVD+-RW/9.5/x4/+DL	DVD+-RW/9.5/x4/+DL	DVD+-RW/9.5/x4/+DL
Wireless LAN	802.11abg (Intel)	802.11bg (Intel)	802.11abg (Intel)	802.11abg (Intel)	802.11abg (Intel)	802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)
Wireless WAN	×	×	×	×	×	○	○	○	○
Bluetooth	○	×	○	○	○	○	○	○	○
Felica	○	○	○	○	○	×	×	×	×
AC Adapter	VGP-AC16V7	VGP-AC16V7	VGP-AC16V7	VGP-AC16V7	VGP-AC16V7	VGP-AC16V8	VGP-AC16V8	VGP-AC16V8	VGP-AC16V8
Battery	VGP-BPS5	VGP-BPS5	VGP-BPS5	VGP-BPS5 or VGP-BPL5	VGP-BPS5 or VGP-BPL5	VGP-BPS5	VGP-BPS5	VGP-BPS5	VGP-BPS5
Color Variation	Black	Black	Black	Black or White or Carbon	Black or White or Carbon	Carbon	Black	White	Black
Keyboard	Japanese Key Board	Japanese Key Board	Japanese Key Board	English Key Board or Japanese Key Board	English Key Board or Japanese Key Board	English Key Board	English Key Board	English Key Board	English Key Board
Memory Stick	○	○	○	○	○	○	○	○	○
OS	XP Home	XP Pro	XP Pro	XP Pro	XP Home	XP Pro	XP Pro	XP Pro	XP Pro
Office	XP Personal	None	None	XP Personal or XP Pro or None	XP Personal or XP Pro or None	None	None	None	None
		[1] [MA]				[2] [MA]	[2] [MA]	[2] [MA]	[2] [MA]

	AM				EU			
Model	VGN-TX630P/B	VGN-TX610P/B	VGN-TX651P/B		VGN-TX1XP/B	VGN-TX1XRP/B	VGN-TX1XP/L	VGN-TX1HP/W
CPU	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz		ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/733/1.10GHz
Chipset	Intel 915GMS	Intel 915GMS	Intel 915GMS		Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS
Graphics	Intel 915 GMS Integrated	Intel 915 GMS Integrated	Intel 915 GMS Integrated		Integrated	Integrated	Integrated	Integrated
LCD	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR		11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR
HDD	60GB	60GB	60GB		60GB	60GB	60GB	60GB
Memory Std	1GB(512MB on-board+512MBx1)	512MB on-board	512MB on-board		1GB(512MB on-board+512MBx1)	1GB(512MB on-board+512MBx1)	1GB(512MB on-board+512MBx1)	512MB on-board
Memory Max	1GB	1GB	1GB		1GB	1GB	1GB	1GB
Optical	Combo/9.5/x24	Combo/9.5/x24	DVD+-RW/9.5/x4/+DL		DVD+-RW/9.5/x4/+DL	DVD+-RW/9.5/x4/+DL	DVD+-RW/9.5/x4/+DL	DVD+-RW/9.5/x4/+DL
Wireless LAN	802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)		802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)
Wireless WAN	○	○	×		×	×	×	×
Bluetooth	○	○	○		○	○	○	○
Felica	×	×	×		×	×	×	×
AC Adapter	VGP-AC16V8	VGP-AC16V8	VGP-AC16V8		VGP-AC16V8	VGP-AC16V8	VGP-AC16V8	VGP-AC16V8
Battery	VGP-BPS5	VGP-BPS5	VGP-BPS5		VGP-BPS5	VGP-BPS5	VGP-BPS5	VGP-BPS5
Color Variation	Black	Black	Black		Black	Black	Carbon	White
Keyboard	English Key Board	English Key Board	English Key Board		-----	-----	-----	-----
Memory Stick	○	○	○		○	○	○	○
OS	XP Pro	XP Pro	XP Pro		XP Pro	XP Pro	XP Pro	XP Pro
Office	None	None	None		None	None	None	None
	[2] [MA]	[2] [MA]			[1] [MA]	[2] [MA]	[1] [MA]	[1] [MA]

- The trademarks or registered trademarks of above table, refer to page 2.
- The model that is accompanied by astarisk (*) is CTO model.
- As for the TX90PS, check the Page 4-2 of “How to identify the TX90PS”, then refer to the Specifications.
- 本表中の商標・登録商標については、２ページをご参照下さい。
- 機種名に(*)がつくのは、CTOモデルです。
- TX90PSは4-2ページの"TX90PSの判別方法"を確認してから Specificationsをご参照ください。

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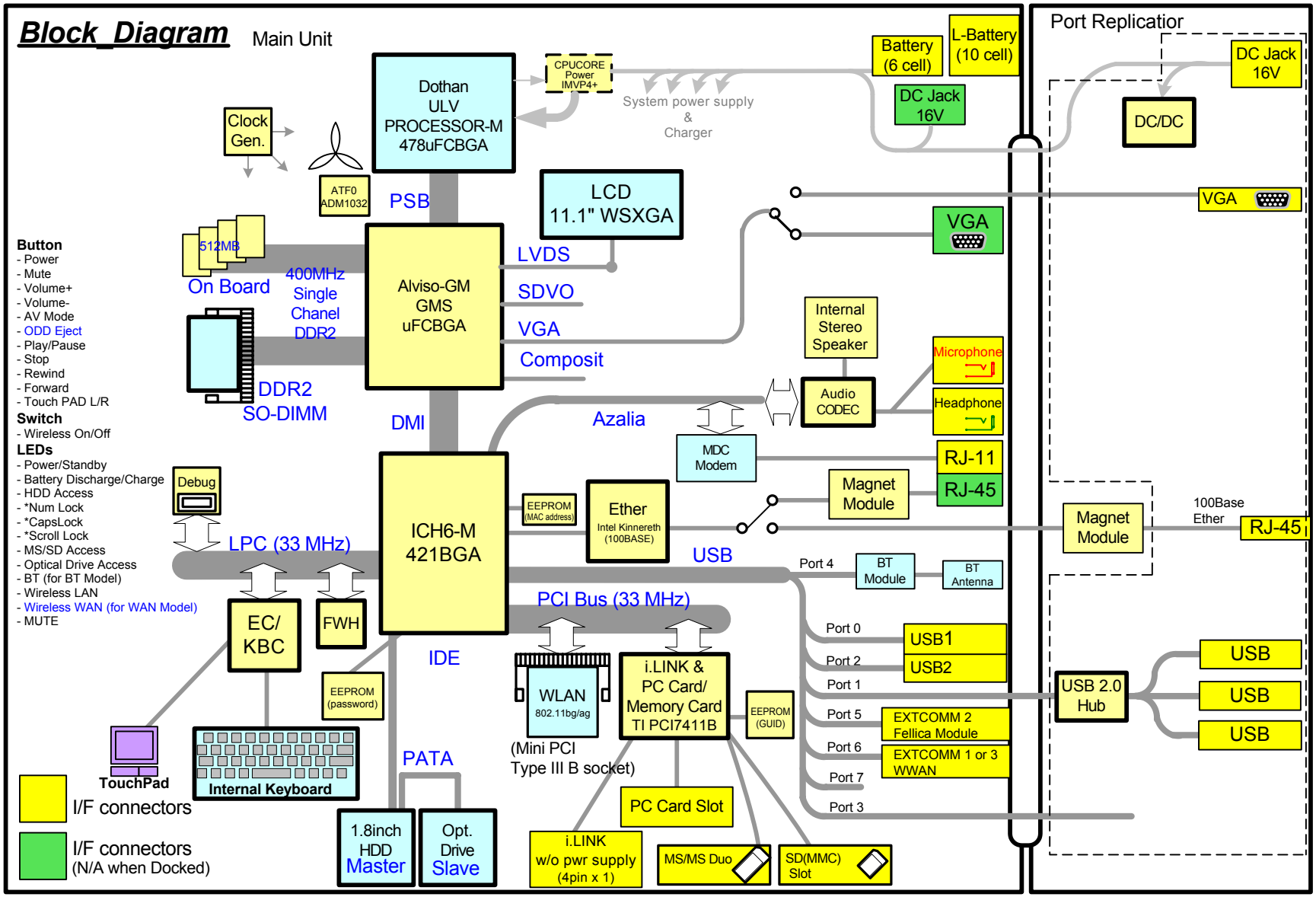
	AO							
Model	VGN-TX17GP/B	VGN-TX17GP/W	VGN-TX17TP/B		VGN-TX16GP/W	VGN-TX16TP/W	VGN-TX16SP/W	
CPU	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz		ULV-PM/Do/733/1.10GHz	ULV-PM/Do/733/1.10GHz	ULV-PM/Do/733/1.10GHz	
Chipset	Intel 915GMS	Intel 915GMS	Intel 915GMS		Intel 915GMS	Intel 915GMS	Intel 915GMS	
Graphics	Integrated	Integrated	Integrated		Integrated	Integrated	Integrated	
LCD	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR		11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	
HDD	60GB	60GB	60GB		40GB	40GB	40GB	
Memory Std	512MB on-board	512MB on-board	512MB on-board		512MB on-board	512MB on-board	512MB on-board	
Memory Max	1.5GB(+1GB)	1.5GB(+1GB)	1.5GB(+1GB)		1.5GB(+1GB)	1.5GB(+1GB)	1.5GB(+1GB)	
Optical	DVD+-RW/9.5/x4/+DL	DVD+-RW/9.5/x4/+DL	DVD+-RW/9.5/x4/+DL		Combo/9.5/x24	Combo/9.5/x24	Combo/9.5/x24	
Wireless LAN	802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)		802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)	
Wireless WAN	×	×	×		×	×	×	
Bluetooth	○	○	○		○	○	×	
Felica	×	×	×		×	×	×	
AC Adapter	VGP-AC16V8	VGP-AC16V8	VGP-AC16V8		VGP-AC16V8	VGP-AC16V8	VGP-AC16V8	
Battery	VGP-BPS5	VGP-BPS5	VGP-BPS5		VGP-BPS5	VGP-BPS5	VGP-BPS5	
Color Variation	Black	White	Black		White	White	White	
Keyboard	English Key Board	English Key Board	English Key Board		English Key Board	English Key Board	English Key Board	
Memory Stick	○	○	○		○	○	○	
OS	XP Pro	XP Pro	XP Pro		XP Pro	XP Pro	XP Pro	
Office	None	None	None		None	None	None	
	⚠2 [MA]	⚠2 [MA]	⚠2 [MA]		⚠2 [MA]	⚠2 [MA]		

	AO				
Model	VGN-TX17C/B	VGN-TX17C/L	VGN-TX16C/B	VGN-TX16C/W	VGN-TX15C/W
CPU	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/753/1.20GHz	ULV-PM/Do/733/1.10GHz	ULV-PM/Do/733/1.10GHz	ULV-CelM/Do/383/1GHz
Chipset	Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS	Intel 915GMS
Graphics	Integrated	Integrated	Integrated	Integrated	Integrated
LCD	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR	11.1/WXGA_HDAR/BR
HDD	60GB	60GB	40GB	40GB	40GB
Memory Std	512MB on-board	512MB on-board	512MB on-board	512MB on-board	512MB on-board
Memory Max	1GB	1GB	1GB	1GB	1GB
Optical	Combo/9.5/x24	Combo/9.5/x24	Combo/9.5/x24	Combo/9.5/x24/Reideen	Combo/9.5/x24
Wireless LAN	802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)	802.11bg (Intel)	802.11bg (Atheros)
Wireless WAN	×	×	×	×	×
Bluetooth	○	○	○	○	○
Felica	×	×	×	×	×
AC Adapter	VGP-AC16V8	VGP-AC16V8	VGP-AC16V8	VGP-AC16V8	VGP-AC16V8
Battery	VGP-BPS5	VGP-BPS5	VGP-BPS5	VGP-BPS5	VGP-BPS5
Color Variation	Black	Carbon	Black	White	White
Keyboard	English Key Board	English Key Board	English Key Board	English Key Board	English Key Board
Memory Stick	○	○	○	○	○
OS	XP Home	XP Home	XP Home	XP Home	XP Home
Office	None	None	None	None	XP Personal

• The trademarks or registered trademarks of above table, refer to page 2.

•本表中の商標・登録商標については、２ページをご参照下さい。

CHAPTER 2.
BLOCK DIAGRAM



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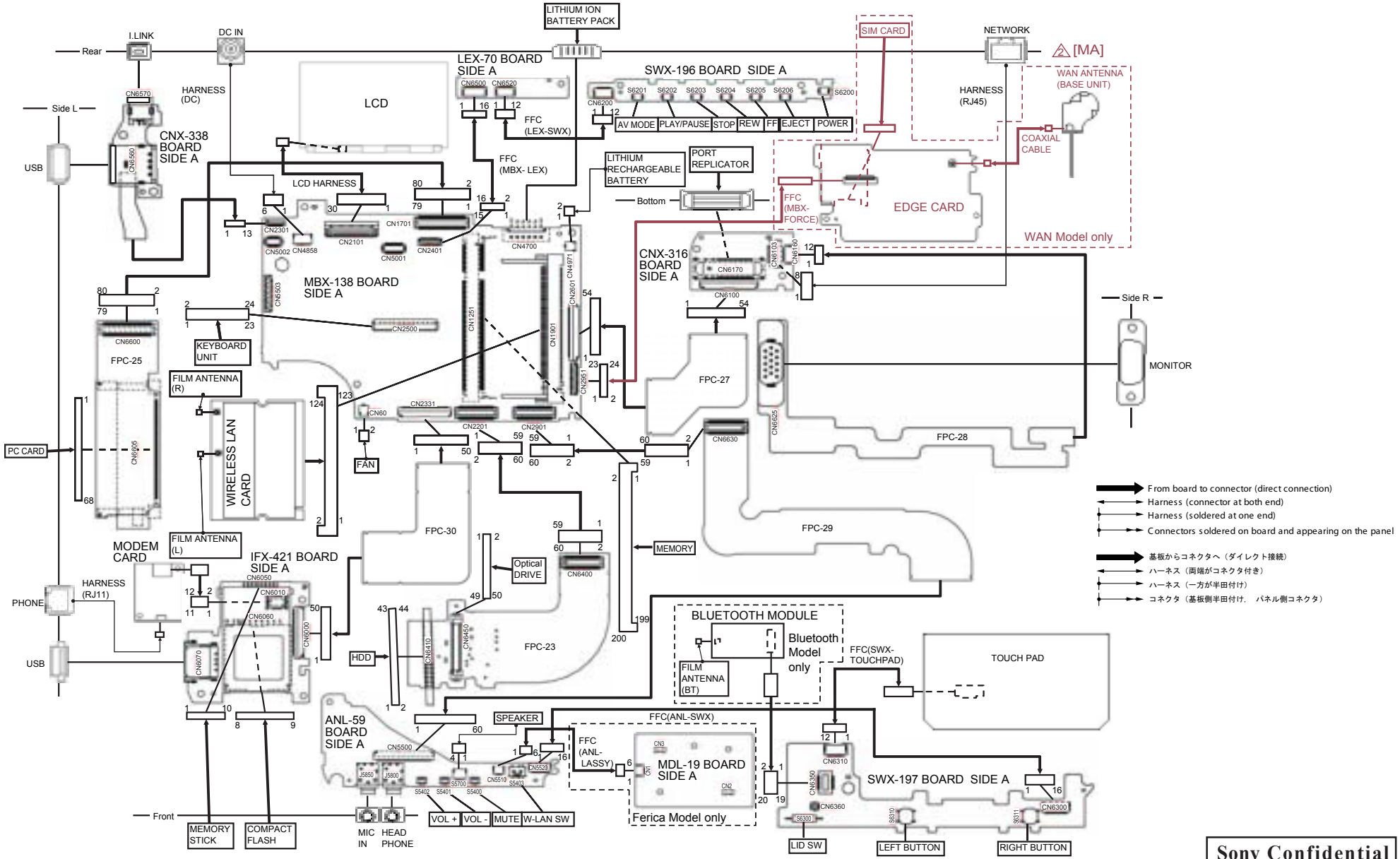
CHAPTER 3.
FRAME HARNESS DIAGRAM



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VGN-TX50B/TX70PZ/TX90PS/TX90S (J)
VGN-TX610P/TX630P/TX650P/TX651P/TX670P/TX690P (AM)
VGN-TX1HP/TX1XP/TX1XRP (EU)
VGN-TX15C/TX16C/TX16GP/TX16SP/TX16TP/TX17C/TX17GP/TX17TP (AO)

CHAPTER 4.
EXPLODED VIEWS AND PARTS LIST

- The parts list is compiled by blocks of a palmrest and bottom etc.The sections of the parts list are different depending on the model.Please refer to list of contents shown in the below.

- 分解図と部品表は，パームレスト，ボトムなどのブロックごとに分かれています。機種によって部品表のセクションが異なりますので，詳細は右下の一覧表を参照してください。

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Palmrest	
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Main Board	
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Bottom	
B-1	4-7
LCD	
L-1. 11.1/WXGA HDAR/BR (To)	4-9
Accessories	
A-1	4-11

NOTE:

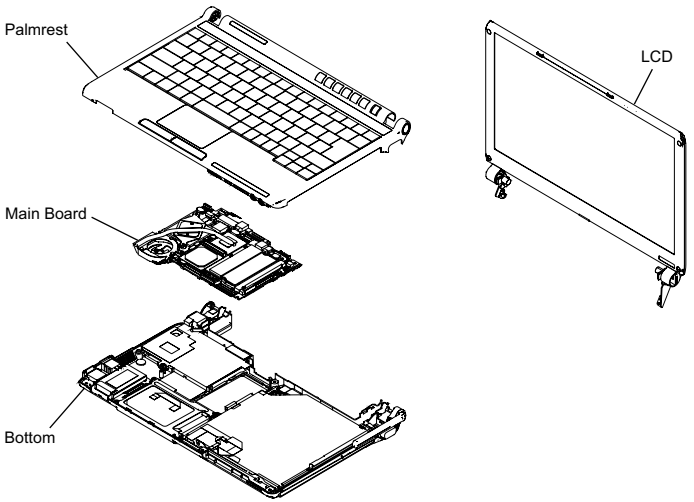
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
  When two or more parts are shown, use the part described first as the main part.
- The parts marked " $ " are the High Value Modules (HVM).
- The parts marked " # " are the parts on which barcode label is attached.For the barcode label, refer to CHAPTER 5.
- The parts marked " & " are the "Customer Replacable Parts (CRP)" that can be replaced by Field Customer Support. Especially the parts with the <&> mark require the special attention to use them. Here fore, check first Whether the desired part is one of the targetted part the Customer Replaceable Parts (CRP), or the non-targetted parts by referring to the exploded view.
- Regarding the boards of this model, the discrete parts on the boards cannot be replaced. However, Some connectorscan be replaced.
- The model that is accompanied by asterisk (*) is the CTO model.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

【使用上の注意】

・*印の部品は常備在庫しておりません。
・図面番号のない部品は供給しません。
・併記部品の場合，上部記載部品をメイン部品として使用してください。
・部品名称の前に$印のついた部品は，High Value Module(HVM)です。
・部品名称の前に#印のついた部品は，バーコードラベル貼付部品です。
バーコードラベルについてはCHAPTER 5を参照してください。
・部品名称の前に&印のついた部品は，お客様窓口などでも交換可能なCustomer Replacable Parts (CRP)です。
特に<&>印のついた部品は，使い分けが必要な部品ですので，分解図でCoustomer Replacable Parts対象部品か，対象外部品かを必ず御確認ください。
・本モデルの基板については，基板上の各部品の修理は行うことができません。ただし，一部のコネクタについては，修理可能です。
・機種名に(*)がつくのはCTOモデルです。

⚠印の部品，または⚠印付きの点線で囲まれた部品は，安全性を維持するために重要な部品です。従って交換時は，必ず指定の部品を使用してください。



			Palmrest	Main Board	Bottom	LCD	Accessories
	J	TX50B/B	P-1	M-1	B-1	L-1	A-1
		TX70PZ	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX90PS	P-1	M-1	B-1	L-1	A-1
		TX90PS*	P-1	M-1	B-1	L-1	A-1
		TX90S*	P-1	M-1	B-1	L-1	A-1
⚠ [MA]	AM	TX690P/L	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX670P/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX670P/W	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX650P/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX630P/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX610P/B	P-1	M-1	B-1	L-1	A-1
		TX651P/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]	EU	TX1XP/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX1XRP/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX1XP/L	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX1HP/W	P-1	M-1	B-1	L-1	A-1
⚠ [MA]	AO	TX17GP/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX17GP/W	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX17TP/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX16GP/W	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX16TP/W	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX16SP/W	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX17C/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX17C/L	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX16C/B	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX16C/W	P-1	M-1	B-1	L-1	A-1
⚠ [MA]		TX15C/W	P-1	M-1	B-1	L-1	A-1

*: CTO model

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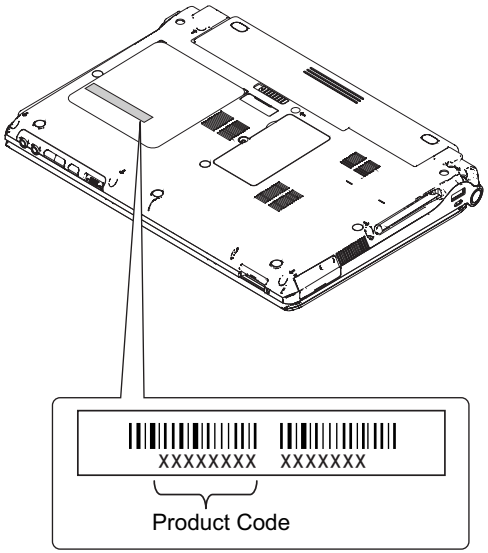
VGN-TX50B/TX70PZ/TX90PS/TX90S (J)
VGN-TX610P/TX630P/TX650P/TX651P/TX670P/TX690P (AM)
VGN-TX1HP/TX1XP/TX1XRP (EU)
VGN-TX15C/TX16C/TX16GP/TX16SP/TX16TP/TX17C/TX17GP/TX17TP (AO)

How to identify the VGN-TX90PS
VGN-TX90PSの判別方法

As for the TX90PS, check the product code with the set, then refer to the corresponding section of the parts list and select the parts to be used.

TX90PSはセットでProduct Codeを確認してから、部品表の該当箇所を参照し、使用する部品を選択してください。

【How to identify the VGN-TX90PS】
【Product Codeの確認方法】

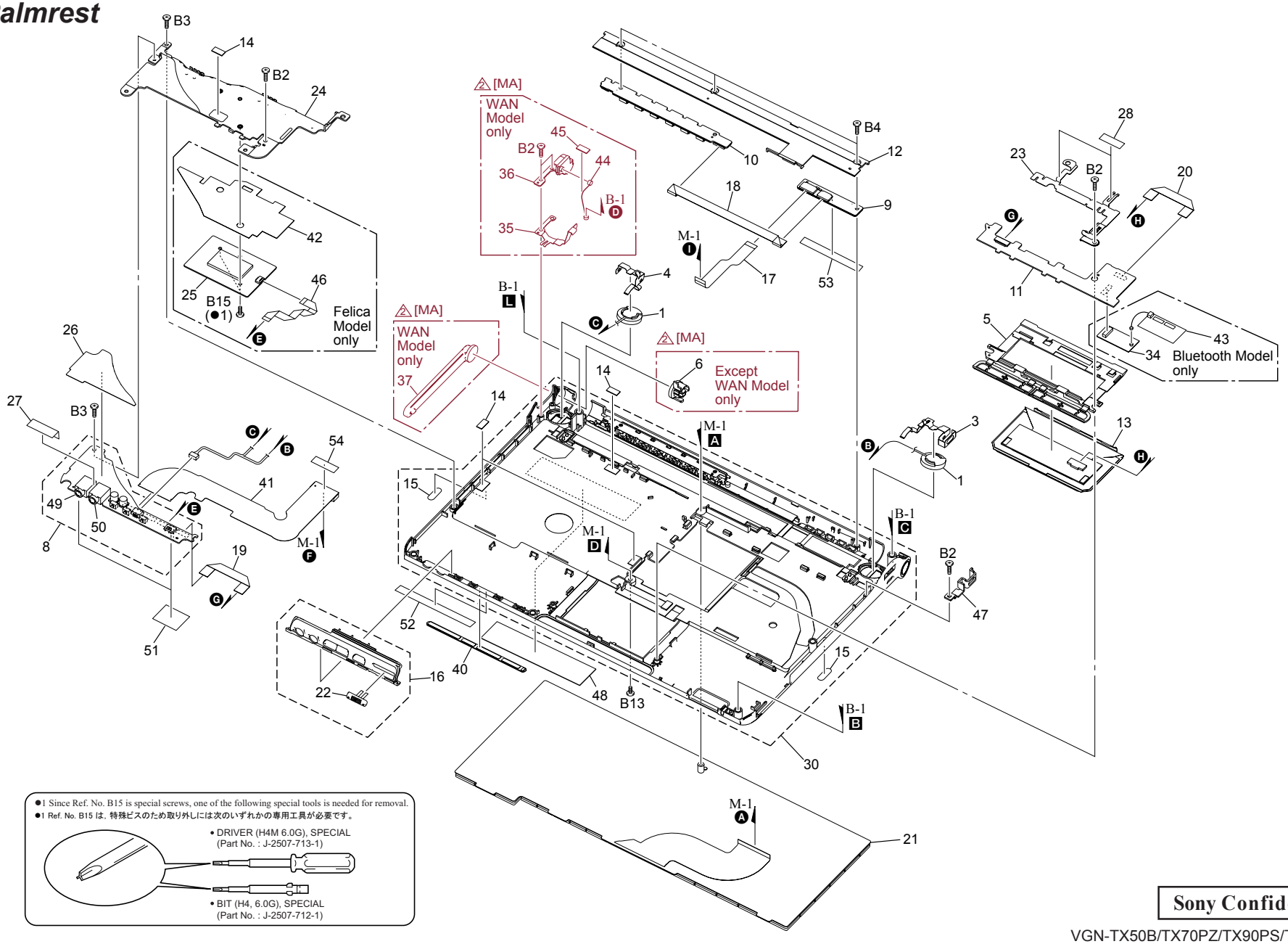


【Example of Parts List】
【部品表記載例】

Case of "28199012" Product code : Refer to the line a.
Case of except "28199012" Product code : Refer to the line b.
Product Codeが"28199012"の場合：a列を参照
Product Codeが"28199012"以外の場合：b列を参照

				J					AM							
Ref.No.	Part No.		Description	TX50B/B	TX70PZ	TX90PS (28199012)	TX90PS*	TX90S*	TX690P/L	TX670P/B	TX670P/W	TX650P/B	TX630P/B	TX610P/B	TX651P/B	
302	1-789-095-81	#	CARD,WIRELESS LAN	●		●	●	●								
	1-761-864-51	#	WIRELESS LAN CARD						●	●	●	●	●	●	●	
	1-761-864-63	#	WIRELESS LAN CARD		●											
	1-761-864-71	#	WIRELESS LAN CARD													
	1-789-014-31	#	CARD,WIRELESS LAN													
303	A-1149-381-A	$ #	COMPLETEPWB MBX138(C10_512)(S)	●			●	●								
	A-1149-382-A	$ #	COMPLETEPWB MBX138(P11_512)(S)													
	A-1149-383-A	$ #	COMPLETEPWB MBX138(P12_512)(S)		●	●	●	●	●	●	●	●	●	●	●	
						a	b									

P-1. Palmrest



●1 Since Ref. No. B15 is special screws, one of the following special tools is needed for removal.
●1 Ref. No. B15 は，特殊ビスのため取り外しには次のいずれかの専用工具が必要です。

• DRIVER (H4M 6.0G), SPECIAL
(Part No. : J-2507-713-1)

• BIT (H4, 6.0G), SPECIAL
(Part No. : J-2507-712-1)

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P-1. Palmrest

Ref.No.	Part No.		Description
1	1-826-232-11		SPEAKER (1.6CM)
3	2-637-041-01		BRACKET (SPL)
4	2-637-042-01		BRACKET (SPR)
8	A-1149-384-A	$	COMPLETE PWB ANL-59 (S)
9	A-1149-388-A	$	COMPLETE PWB LEX-70 (S)
10	A-1149-389-A	$	COMPLETE PWB SWX-196 (S)
11	A-1149-390-A	$	COMPLETE PWB SWX-197 (S)
12	2-637-035-01		COVER (PALM REST)
14	2-638-452-01		CUSHION (PA)
16	X-2067-117-1		ESCUTCHEON (F) ASSY
17	1-830-633-11		FFC 1 (MBX138-LEX70)
18	1-830-634-11		FFC 2 (LEX70-SWX196)
19	1-830-637-11		FFC 5 (ANL59-SWX197)
20	1-830-638-11		FFC 6 (SWX197-TOUCHPAD)
22	2-637-030-01		KNOB (WL)
23	2-637-039-01		PLATE (TP), GROUND
24	X-2067-119-1		REINFORCEMENT (OP) ASSY
26	2-638-451-01		SHEET (AU)
27	2-349-989-01		SHEET (AUDIO)
28	4-676-302-01		TAPE (COMMON)
41	A-1153-257-A		COMPLETE FPC FPC-29 (S)
47	2-656-001-01		REINFORCEMENT (LOCK)
48	2-187-191-01		LASER CAUTION LABEL
49	1-819-666-11		JA9333L-R1M9-7F
50	1-819-667-21		FOXCONN AUDIO JACK
51	2-661-313-01		SHEET (ANL)
52	2-661-314-01		SHEET (FP)
53	2-661-315-01		SHEET (LEX)
54	2-660-311-01		TAPE (6X17)
B2	4-676-936-01		+SCREW,O2 +SPECIAL HEAD SELF S
B3	4-645-214-01		GRIP, M2
B4	4-642-229-01		TAPPING (B 2X)
B13	4-644-637-21		GRIP, M2 EG

	Ref. No.	Part No.		Description	J					AM						EU			AO														
					TX50B/B	TX70PZ	TX90PS (28199012)	TX90PS*	TX90S*	TX690P/L	TX670P/B	TX670P/W	TX650P/B	TX630P/B	TX610P/B	TX651P/B	TX1XP/B	TX1XRP/B	TX1XP/L	TX1HP/W	TX17GP/B	TX17GP/W	TX17TP/B	TX16GP/W	TX16TP/W	TX16SP/W	TX17C/B	TX17C/L	TX16C/B	TX16C/W	TX15C/W
	5	2-637-032-01		BUTTON (TP) [Black/Carbon]	●	●	●	●	●	●	●		●	●	●		●	●	●		●		●				●	●	●		
		2-637-032-11		BUTTON (TP) [White]				●	●		●									●		●		●	●	●				●	●
	6	X-2067-118-1		CAP (PALM R)(M) ASSY [Black/Carbon]	●	●	●	●	●							●	●	●	●		●		●				●	●	●		
		X-2067-353-1		CAP (PALM R) (W) ASSY [White]				●	●											●		●		●	●	●				●	●
	13	A-1154-224-A		PAD ASSY (B) (S), TOUCH [Black/Carbon]	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●		●				●	●	●		
		A-1154-225-A		PAD ASSY (W) (S), TOUCH [White]				●	●		●									●		●		●	●	●				●	●
	15	2-654-723-01		CUSHION (PALM) [Black/Carbon]	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●		●				●	●	●		
		2-654-723-11		CUSHION (PALM) [White]				●	●		●									●		●		●	●	●				●	●
	21	1-479-449-11	#	KEY BOARD UNIT (JP)	●	●	●	●	●																						
		1-479-449-21	#	KEY BOARD UNIT (US)				●	●							●					●	●		●			●	●	●	●	●
⚠ [MA]		1-479-449-81	#	KEY BOARD UNIT (US)						●	●	●	●	●	●																
⚠ [MA]		1-479-449-61	#	(English)...KEY BOARD UNIT (PT)													●														
⚠ [MA]		1-479-449-71	#	(Russian)...KEY BOARD UNIT (RU)														●													
⚠ [MA]		1-479-450-11	#	(English)...KEY BOARD UNIT (GB)													●		●	●											
⚠ [MA]		1-479-450-21	#	(German)...KEY BOARD UNIT (DE)													●		●	●											
⚠ [MA]		1-479-450-31	#	(English,German,French,Italian)...KEY BOARD UNIT (CH)													●														
⚠ [MA]		1-479-450-41	#	(French)...KEY BOARD UNIT (FR)													●		●	●											
⚠ [MA]		1-479-450-51	#	(Italian)...KEY BOARD UNIT (IT)													●		●	●											
⚠ [MA]		1-479-450-61	#	(Spanish)...KEY BOARD UNIT (ES)													●			●											
⚠ [MA]		1-479-450-81	#	(English)...KEY BOARD UNIT (SE)													●														
⚠ [MA]		1-479-450-91	#	(English)...KEY BOARD UNIT (BE)													●			●											
⚠ [MA]		1-479-449-41	#	KEY BOARD UNIT (TH)																					●						
⚠ [MA]		1-479-449-51	#	KEY BOARD UNIT (TW)																		●		●							
	25	A-1154-927-A		RW MODULE ASSY (S)	●	●	●	●	●																						
	30	X-2067-116-1		PALMREST(M) ASSY [Black/Carbon]						●	●		●	●	●	●	●	●	●		●		●				●	●	●		
		X-2067-350-1		PALMREST(MF) ASSY [Black/Carbon]	●	●	●	●	●																						
⚠ [MA]		X-2067-351-1		PALMREST(W) ASSY [White]							●									●		●		●	●	●				●	●
		X-2067-352-1		PALMREST(WF) ASSY [White]				●	●																						
	34	1-479-129-12		BLUETOOTH MODULE	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●
⚠ [MA]	35	2-654-503-01		PLATE (GAR)						●	●	●	●	●	●																
⚠ [MA]	36	1-754-391-21		ANTENNA, WAN (BASE UNIT)						●	●	●	●	●	●																
⚠ [MA]	37	1-754-391-11		ANTENNA, WAN (ELEMENT UNIT)						●	●	●	●	●	●																
⚠ [MA]	40	2-637-031-01		PANEL (F)		●																			●						
		2-637-031-11		PANEL (F)	●		●	●	●							●	●	●	●	●	●	●	●	●		●	●	●	●	●	●
⚠ [MA]		2-637-031-21		PANEL (F)						●	●	●	●	●	●																
	42	2-650-362-01		SHEET, FERRITE	●	●	●	●	●																						
	43	1-754-332-31		FILM ANTENNA(BT)	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●
⚠ [MA]	44	1-830-851-21		CABLE, COAXIAL (WITH U.F.L CON)						●	●	●	●	●	●																
⚠ [MA]	45	4-658-789-02		TAPE (HARNESS)						●	●	●	●	●	●																
	46	1-830-636-11		FFC 4 (ANL59-LASSY)	●	●	●	●	●																						
	B15	4-680-939-01		SCREW(M2)(GOKUHIRA)(MITSUMIZO)	●	●	●	●	●																						
					⚠ [MA]					⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]

- This parts list contains two different types of parts.
  The first type is the parts that are common to all models.
  The other type is the parts that are different depending on each model.
- As for the TX90PS, check the Page 4-2 of "How to identify the TX90PS" for TX90PS, then refer to the Parts list.
- この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。
- TX90PSは4-2ページの"TX90PSの判別方法"を確認してから、部品表をご参照ください。

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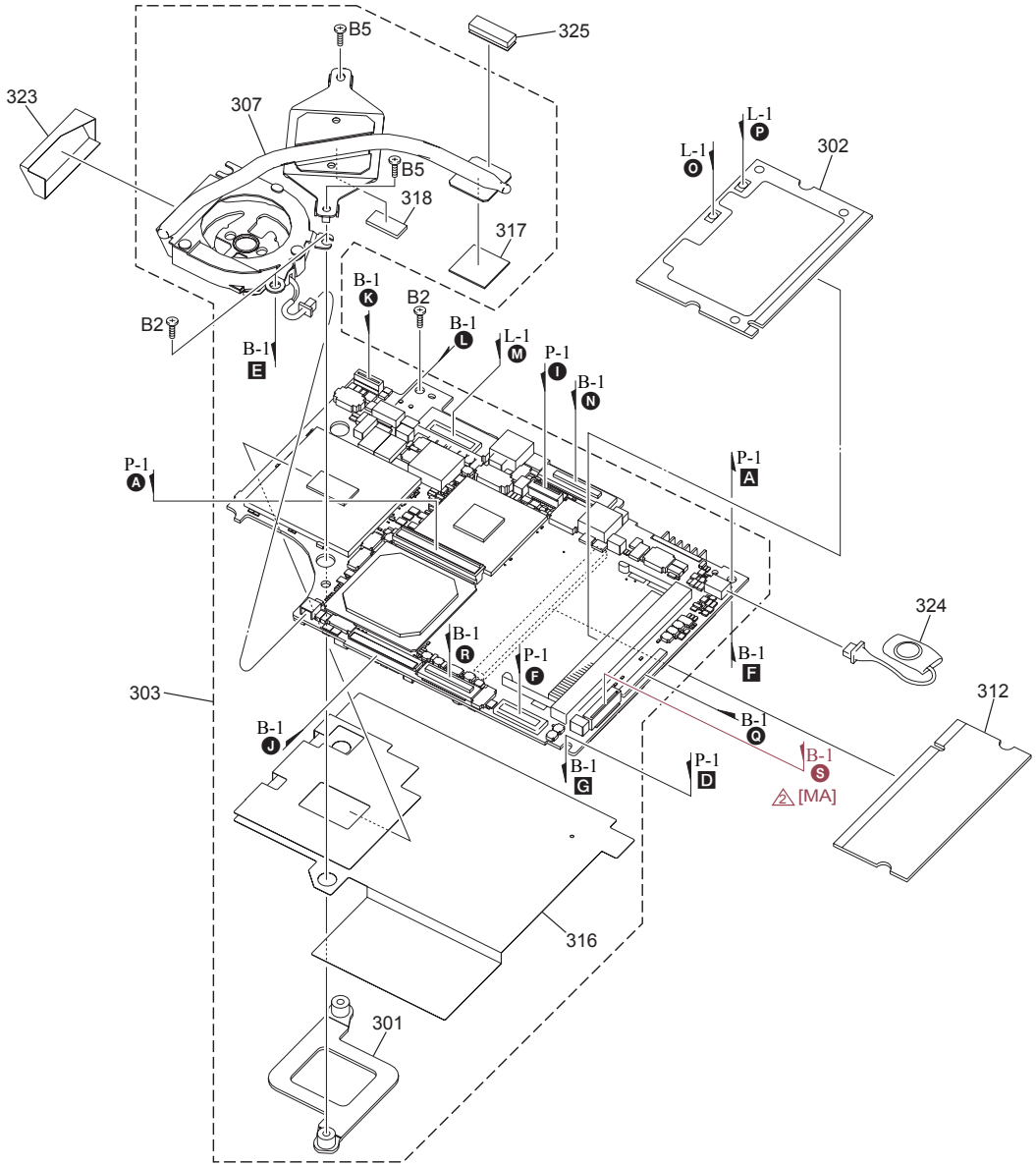
VGN-TX50B/TX70PZ/TX90PS/TX90S (J)
VGN-TX610P/TX630P/TX650P/TX651P/TX670P/TX690P (AM)
VGN-TX1HP/TX1XP/TX1XRP (EU)
VGN-TX15C/TX16C/TX16GP/TX16SP/TX16TP/TX17C/TX17GP/TX17TP (AO)

M-1. Main Board



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M-1. Main Board

Ref.No.	Part No.	Description
301	2-637-075-01	BRACKET (CPU)
307	1-787-364-11	FAN
316	2-638-456-01	SHEET (MBX)
317	2-654-740-01	THERMAL SHEET (GM)
318	4-673-367-02	THERMAL SHEET(CPU)
323	2-650-083-01	SHEET (FIN)
324	1-756-584-11	LITHIUM RECHARGEABLE BATTERY
325	2-655-677-01	CUSHION (GM)
B2	4-676-936-01	+SCREW,O2 +SPECIAL HEAD SELF S
B5	4-672-834-51	SCREW, +B EG GRIP

	Ref. No.	Part No.		Description	J					AM							EU				AO											
					TX50B/B	TX70PZ	TX90PS (28199012)	TX90PS*	TX90S*	TX690P/L	TX670P/B	TX670P/W	TX650P/B	TX630P/B	TX610P/B	TX651P/B	TX1XP/B	TX1XRP/B	TX1XP/L	TX1HP/W	TX17GP/B	TX17GP/W	TX17TP/B	TX16GP/W	TX16TP/W	TX16SP/W	TX17C/B	TX17C/L	TX16C/B	TX16C/W	TX15C/W
	302	1-789-095-81	#	CARD,WIRELESS LAN	●		●	●	●																							
⚠ [MA]		1-761-864-51	#	WIRELESS LAN CARD						●	●	●	●	●	●	●						●		●							
⚠ [MA]		1-761-864-63	#	WIRELESS LAN CARD		●																										
⚠ [MA]		1-761-864-71	#	WIRELESS LAN CARD													●	●	●	●	●	●		●		●	●	●	●	●		
		1-789-014-31	#	CARD,WIRELESS LAN																												●
	303	A-1149-381-A	$ #	COMPLETEPWB MBX138(C10_512)(S)	●			●	●																							●
⚠ [MA]		A-1149-382-A	$ #	COMPLETEPWB MBX138(P11_512)(S)															●					●	●	●			●	●		
		A-1149-383-A	$ #	COMPLETEPWB MBX138(P12_512)(S)		●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●				●	●				
	312	6-707-504-01	#	IC HYS64T128021HDL-5-A				●	●	●																						
		6-707-350-01	#	IC HYS64T64020HDL-5-A			●	●	●		●	●		●			●	●	●													
						⚠ [MA]				⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]		⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]

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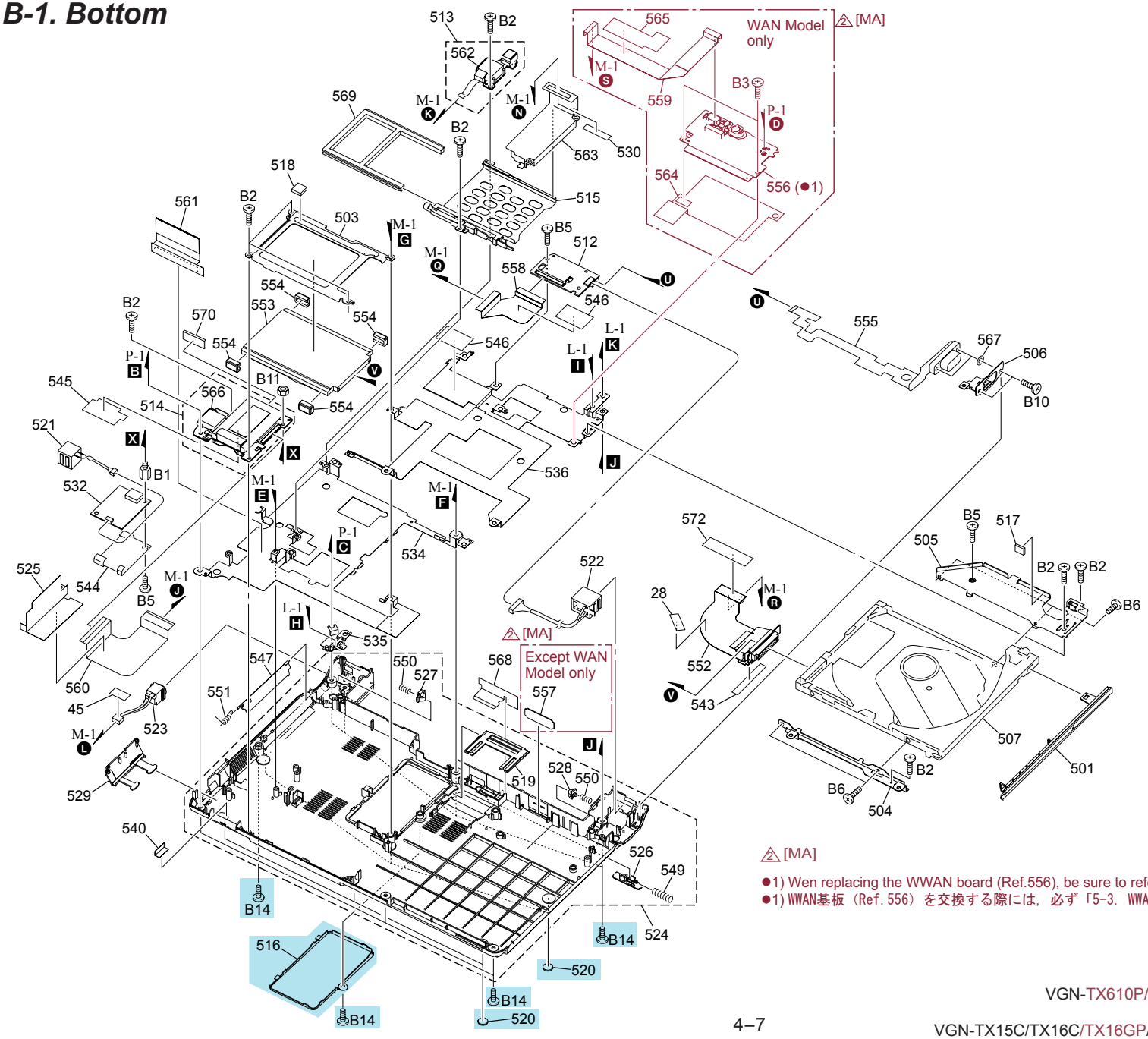
B-1. Bottom



[MA]

●1) Wen replacing the WWAN board (Ref.556), be sure to refer to "5-3. Note for WWAN Board Replacement".
●1) WWAN基板（Ref. 556）を交換する際には，必ず「5-3. WWAN基板交換時の注意」を参照してください。

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B-1. Bottom

Ref.No.	Part No.		Description
28	4-676-302-01		TAPE (COMMON)
45	4-658-789-02		TAPE (HARNESS)
503	2-637-077-01		BRACKET (HDD)
504	2-637-084-01		BRACKET (OPL)
505	2-637-085-01		BRACKET (OPR)
506	2-637-070-01		BRACKET (VGA)
512	A-1149-385-A	$	COMPLETE PWB CNX-316 (S)
513	A-1149-386-A	$	COMPLETE PWB CNX-338 (S)
514	A-1149-387-A	$	COMPLETE PWB IFX-421 (S)
515	1-819-775-11		CONNECTOR, PC CARD
516	2-637-071-01	&	COVER (MEMORY)
517	2-187-193-01		CUSHION (OP)
518	2-514-300-01		CUSHION (SCREW)
519	2-637-054-01		DOOR (POTORI)
520	2-177-286-01	&	FOOT
521	1-963-843-11		HARNESS(RJ11)
522	1-963-842-11		HARNESS(RJ45)
523	1-963-879-11		HARNESS,CONNECTOR WITH
524	X-2067-120-1		HOUSING (BOTTOM) ASSY
525	2-650-288-01		INSULATOR (MDCR)
526	2-637-048-01		KNOB (BT)
527	2-637-049-01		LATCH (BL)
528	2-637-050-01		LATCH (BR)
530	2-638-454-01		TAPE (FPC)
532	1-417-539-12	#	MODEM CARD
534	2-637-067-01		PLATE (BT), SHIELD
535	2-637-068-01		PLATE (BTL), SHIELD
536	2-637-069-01		PLATE (BTR), SHIELD
540	2-654-880-01		SHEET (BF)
543	2-656-349-01		SHEET (FPC)
544	2-650-713-01		SHEET (MDC)
545	2-654-982-01		SHEET (MSD)
546	2-656-350-01		SHEET (PR)
547	2-637-047-01		SHUTTER (PCC)
549	2-637-051-01		SPRING (BT), COMPRESSION COIL
550	2-637-052-01		SPRING (LATCH), COIL
551	2-637-053-01		SPRING (PCC), TORSION
552	A-1153-260-A		COMPLETE FPC FPC-23 (TO) (S)
554	2-637-080-01		CUSHION (HDDTO)
555	A-1153-259-A		COMPLETE FPC FPC-28 (S)
558	1-868-275-11		PWB, FPC-27 PRINT
560	1-868-277-11		PWB, FPC-30 PRINT
561	2-650-082-01		SHEET (FAN)
562	1-794-548-31		CONNECTOR, USB(A)
563	A-1153-258-A		COMPLETE FPC FPC-25 (S)
566	1-818-784-21		USB CONNECTOR (A)
567	2-656-461-01		WASHER (6.5-3.3),COPPER LEAF
568	2-657-424-01		SHEET (LAN)
569	2-655-676-01		CARD, DUMMY
570	2-661-114-01		CUSHION(KBMS)
572	2-657-644-01		TAPE (40X15)
B1	4-651-989-61		SPACER (MBX)
B2	4-676-936-01		+SCREW,O2 +SPECIAL HEAD SELF S
B5	4-672-834-51		SCREW, +B EG GRIP
B6	2-022-855-01		SCREW M2 EG
B10	4-674-716-01		SCREW (NO.4-40) (UNC)
B11	4-673-751-01		NUT (M2) (TYPE2)
B14	4-672-834-31	&	SCREW, +B EG GRIP

	Ref. No.	Part No.		Description	J					AM							EU				AO														
					TX50B/B	TX70PZ	TX90PS (28199012)	TX90PS*	TX90S*	TX690P/L	TX670P/B	TX670P/W	TX650P/B	TX630P/B	TX610P/B	TX651P/B	TX1XP/B	TX1XRP/B	TX1XP/L	TX1HP/W	TX17GP/B	TX17GP/W	TX17TP/B	TX16GP/W	TX16TP/W	TX16SP/W	TX17C/B	TX17C/L	TX16C/B	TX16C/W	TX15C/W				
	501	X-2067-123-1		BEZEL(M) ASSY, OPT [Black/Carbon]	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●		●				●	●	●							
		X-2067-354-1		BEZEL (W) ASSY, OPT [White]				●	●			●								●		●		●	●	●				●	●					
	507	A-1149-397-A	$ #	COMBODRIVE(UJDA765,9.5MM,R)(S)		●		●	●					●	●									●	●	●	●	●	●	●	●					
		A-1149-395-A	$ #	DVD+-RW (UJ-832M,9.5MM,R) (S)				●	●	●	●	●	●			●	●	●	●	●	●	●	●													
		A-1149-396-A	$ #	DVDRWSM (UJ-832M,9.5MM,R) (S)	●		●	●	●																											
	529	2-637-057-01		LID (L) [Black/Carbon]	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●		●				●	●	●							
		2-637-057-11		LID (L) [White]				●	●			●								●		●		●	●	●				●	●					
	553	A-1149-392-A	$ #	HDD (MK4006GAH-40GB) (S)		●		●	●															●	●	●			●	●	●					
		A-1149-393-A	$ #	HDD (MK6006GAH-60GB) (S)	●		●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●				●	●								
		A-1149-394-A	$ #	HDD (MK8007GAH-80.0GB) (S)				●	●																											
△2 [MA]	556	A-1153-774-A	$ #	WWAN UNIT (-31) (S)						●	●	●	●	●	●																					
	557	2-637-074-01		SHEET (GPOP)	●	●	●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
△2 [MA]	559	1-830-635-11		FFC 3 (MBX138-FORCE)						●	●	●	●	●	●																					
△2 [MA]	564	2-637-073-01		SHEET (BTR)						●	●	●	●	●	●																					
△2 [MA]	565	2-656-348-01		TAPE (MW)						●	●	●	●	●	●																					
△2 [MA]	B3	4-645-214-01		GRIP, M2						●	●	●	●	●	●																					
						△1 [MA]				△2 [MA]	△2 [MA]	△2 [MA]	△2 [MA]	△2 [MA]	△2 [MA]		△1 [MA]	△2 [MA]	△1 [MA]	△1 [MA]	△2 [MA]	△2 [MA]	△2 [MA]	△2 [MA]	△2 [MA]	△1 [MA]		△1 [MA]	△1 [MA]	△1 [MA]	△1 [MA]	△1 [MA]				

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  The first type is the parts that are common to all models.
  The other type is the parts that are different depending on each model.
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- この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。
- TX90PSは4-2ページの"TX90PSの判別方法"を確認してから、部品表をご参照ください。

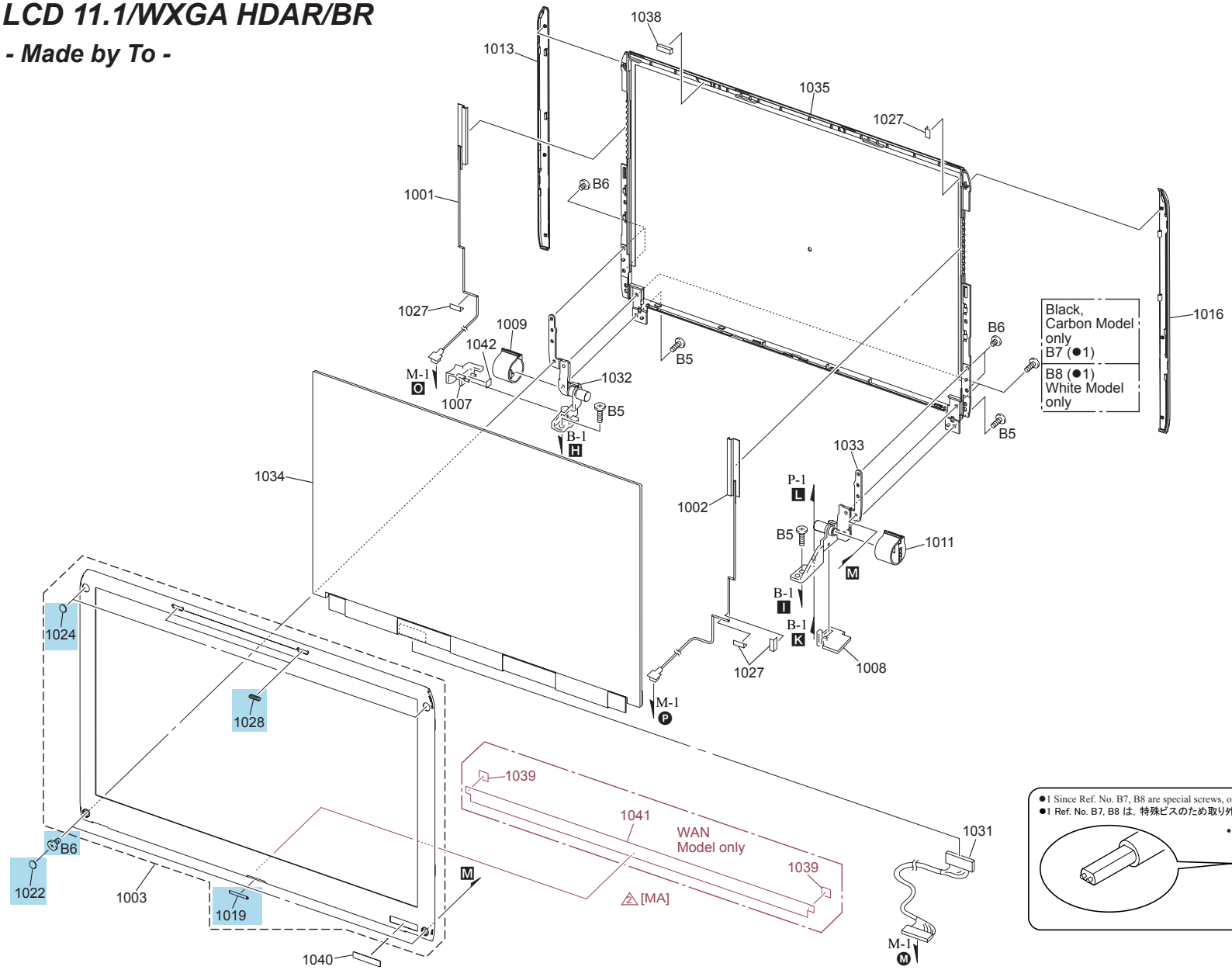
●1) Wen replacing the WWAN board (Ref.556), be sure to refer to "5-3. Note for WWAN Board Replacement".
●1) WWAN基板（Ref. 556）を交換する際には，必ず「5-3. WWAN基板交換時の注意」を参照してください。
△2 [MA]

Sony Confidential

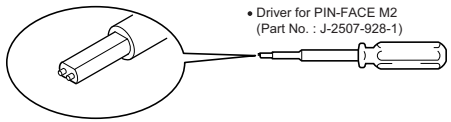
VGN-TX50B/TX70PZ/TX90PS/TX90S (J)
VGN-TX610P/TX630P/TX650P/TX651P/TX670P/TX690P (AM)
VGN-TX1HP/TX1XP/TX1XRP (EU)
VGN-TX15C/TX16C/TX16GP/TX16SP/TX16TP/TX17C/TX17GP/TX17TP (AO)

L-1. LCD 11.1/WXGA HDAR/BR

- Made by To -



●1 Since Ref. No. B7, B8 are special screws, one of the following special tools is needed for removal.
●1 Ref. No. B7, B8 は，特殊ビスのため取り外しには次のいずれかの専用工具が必要です。



• Driver for PIN-FACE M2
(Part No. : J-2507-928-1)

Sony Confidential

VGN-TX50B/TX70PZ/TX90PS/TX90S (J)
VGN-TX610P/TX630P/TX650P/TX651P/TX670P/TX690P (AM)
VGN-TX1HP/TX1XP/TX1XRP (EU)
VGN-TX15C/TX16C/TX16GP/TX16SP/TX16TP/TX17C/TX17GP/TX17TP (AO)

L-1. LCD 11.1/WXGA HDAR/BR

- Made by To -

Ref.No.	Part No.		Description
1001	1-754-393-11		ANTENNA, FILM (L)
1002	1-754-393-21		ANTENNA, FILM (R)
1007	2-637-055-01		COVER (BL)
1008	2-637-056-01		COVER (BR)
1027	2-637-009-01		CUSHION (LCD)
1031	1-964-045-11		HARNESS, LCD
1032	2-637-002-01		HINGE (L)
1033	2-637-003-01		HINGE (R)
1034	A-1149-391-A	$ #	LCD LTD111EXCX (S)
1038	2-637-004-01		MAGNET
1042	2-660-980-01		TAPE(CBL)
B5	4-672-834-51		SCREW, +B EG GRIP
B6	2-022-855-01	<&>	SCREW M2 EG

Ref. No.	Part No.	Description	J					AM						EU				AO											
			TX50B/B	TX70PZ	TX90PS	TX90PS (28199012)	TX90S*	TX690P/L	TX670P/B	TX670P/W	TX650P/B	TX630P/B	TX610P/B	TX651P/B	TX1XP/B	TX1XRP/B	TX1XP/L	TX1HP/W	TX17GP/B	TX17GP/W	TX17TP/B	TX16GP/W	TX16TP/W	TX16SP/W	TX17C/B	TX17C/L	TX16C/B	TX16C/W	TX15C/W
1003	X-2102-540-1	BEZEL (B) ASSY [Black]	●	●	●	●	●		●		●	●	●	●	●	●			●	●					●		●		
	X-2102-541-1	BEZEL (W) ASSY [White]				●	●			●							●			●		●	●	●				●	●
	X-2102-542-1	BEZEL (X) ASSY [Carbon]				●	●	●										●								●			
1009	2-637-001-01	COVER (HL) [Black/Carbon]	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●	●					●	●	●		
	2-637-001-11	COVER (HL) [White]				●	●			●								●				●	●	●				●	●
1011	2-637-000-01	COVER (HR) [Black/Carbon]	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●	●					●	●	●		
	2-637-000-11	COVER (HR) [White]				●	●			●								●				●	●	●				●	●
1013	2-636-999-01	COVER (WLANL) [Black]	●	●	●	●	●		●		●	●	●	●	●	●			●	●					●		●		
	2-636-999-11	COVER (WLANL) [White]				●	●			●								●				●	●	●				●	●
	2-636-999-21	COVER (WLANL) [Carbon]				●	●	●										●								●			
1016	2-636-998-01	COVER (WLANR) [Black]	●	●	●	●	●		●		●	●	●	●	●	●			●	●					●		●		
	2-636-998-11	COVER (WLANR) [White]				●	●			●								●				●	●	●				●	●
	2-636-998-21	COVER (WLANR) [Carbon]				●	●	●										●								●			
1019	2-637-008-01	& CUSHION (DCC) [Black]	●	●	●	●	●		●		●	●	●	●	●	●			●	●					●		●		
	2-637-008-11	& CUSHION (DCC) [White]				●	●			●								●				●	●	●				●	●
	2-637-008-21	& CUSHION (DCC) [Carbon]				●	●	●										●								●			
1022	2-637-007-01	& CUSHION (DD) [Black]	●	●	●	●	●		●		●	●	●	●	●	●			●	●					●		●		
	2-637-007-11	& CUSHION (DD) [White]				●	●			●								●				●	●	●				●	●
	2-637-007-21	& CUSHION (DD) [Carbon]				●	●	●										●								●			
1024	2-637-006-01	& CUSHION (DU) [Black]	●	●	●	●	●		●		●	●	●	●	●	●			●	●					●		●		
	2-637-006-11	& CUSHION (DU) [White]				●	●			●								●				●	●	●				●	●
	2-637-006-21	& CUSHION (DU) [Carbon]				●	●	●										●								●			
1028	4-670-190-21	& CUSHION (SIDE) [Black]	●	●	●	●	●		●		●	●	●	●	●	●			●	●					●		●		
	4-670-190-31	& CUSHION (SIDE) [White]				●	●			●								●				●	●	●				●	●
	4-670-190-41	& CUSHION (SIDE) [Carbon]				●	●	●										●								●			
1035	A-1154-928-A	LOGO(B)ASSY,DISPLAY(S) [Black]	●	●	●	●	●		●		●	●	●	●	●	●			●	●					●		●		
	A-1154-929-A	LOGO (W) ASSY,DISPLAY(S) [White]				●	●			●								●				●	●	●				●	●
	A-1154-930-A	LOGO(CARBON)ASSY,DISPLAY(S) [Carbon]				●	●	●										●								●			
⚠ [MA] 1039	2-656-347-01	SHEET (BEZEL), EMI						●	●	●	●	●	●																
1040	2-651-603-02	LABEL ID(J) [Carbon]					●																						
	2-651-603-12	LABEL ID(J) [White]					●																						
	2-651-603-22	LABEL ID(J) [Black]				●	●																						
	2-651-603-32	LABEL ID(J) [Carbon]					●																						
	2-651-603-42	LABEL ID(J) [White]					●																						
	2-651-603-52	LABEL ID(J) [Black]					●																						
⚠ [MA]	2-651-603-62	LABEL ID(J)	●																										
⚠ [MA]	2-651-603-72	LABEL ID(J)		●																									
⚠ [MA]	2-656-144-02	ID LABEL (U)						●																					
⚠ [MA]	2-656-144-12	ID LABEL (U)							●																				
⚠ [MA]	2-656-144-22	ID LABEL (U)								●																			
⚠ [MA]	2-656-144-32	ID LABEL (U)									●																		
⚠ [MA]	2-656-144-42	ID LABEL (U)										●																	
⚠ [MA]	2-656-144-52	ID LABEL (U)											●																
⚠ [MA]	2-656-144-62	ID LABEL (U)												●															
⚠ [MA]	2-655-073-02	ID LABEL(E)													●														
⚠ [MA]	2-655-073-12	ID LABEL(E)														●													
⚠ [MA]	2-655-073-22	ID LABEL(E)															●												
⚠ [MA]	2-655-073-32	ID LABEL(E)																●											
⚠ [MA]	2-655-814-02	ID LABEL(C)																							●				
⚠ [MA]	2-655-814-12	ID LABEL(C)																								●			
⚠ [MA]	2-655-814-22	ID LABEL(C)																									●		
⚠ [MA]	2-655-814-32	ID LABEL(C)																										●	
⚠ [MA]	2-655-814-42	ID LABEL(C)																											●
⚠ [MA]	2-655-815-02	ID LABEL(I)																	●										
⚠ [MA]	2-655-815-12	ID LABEL(I)																		●									
⚠ [MA]	2-655-815-22	ID LABEL(I)																			●								
⚠ [MA]	2-655-815-42	ID LABEL(I)																				●							
⚠ [MA]	2-655-815-52	ID LABEL(I)																					●						
⚠ [MA]	2-655-815-62	ID LABEL(I)																						●					
⚠ [MA] 1041	2-656-346-01	SHEET (BEZEL)						●	●	●	●	●	●																
B7	2-660-372-01	SCREW (PIN-FACE M2), ORNAMENT	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●	●					●	●	●		
B8	2-660-372-11	SCREW (PIN-FACE M2), ORNAMENT				●	●			●								●				●	●	●				●	●
				⚠ [MA]				⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]

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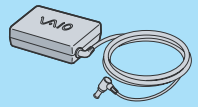
Sony Confidential

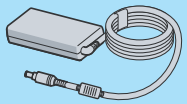
VGN-TX50B/TX70PZ/TX90PS/TX90S (J)
VGN-TX610P/TX630P/TX650P/TX651P/TX670P/TX690P (AM)
VGN-TX1HP/TX1XP/TX1XRP (EU)
VGN-TX15C/TX16C/TX16GP/TX16SP/TX16TP/TX17C/TX17GP/TX17TP (AO)

A-1. Accessories

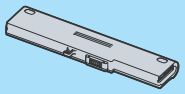
2001 AC Adaptor



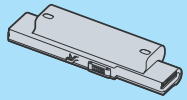
2002 AC Adaptor



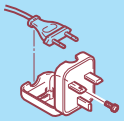
2003 Battery Pack (S)



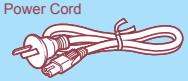
2004 Battery Pack (L)



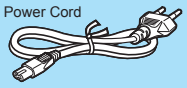
[MA] **2005** Adaptor Conversion Plug 3P



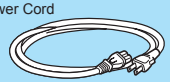
[MA] **2006** Power Cord



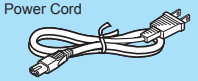
[MA] **2007** Power Cord



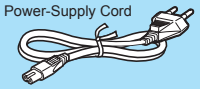
2008 Power Cord



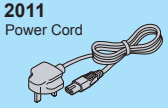
[MA] **2009** Power Cord



[MA] **2010** Power-Supply Cord



[MA] **2011** Power Cord

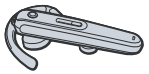


[MA] **2012** Power-Supply Cord

[MA] **2014** Power-Supply Cord Set

[MA] **2015** Headphone

2016 Headset



	Ref. No.	Part No.			Description	J				AM						EU			AO											
						TX50B/B	TX70PZ	TX90PS	TX90PS* (2819012)	TX90S*	TX690P/L	TX670P/B	TX670P/W	TX650P/B	TX630P/B	TX610P/B	TX651P/B	TX1XP/B	TX1XRP/B	TX1XP/L	TX1HP/W	TX17GP/B	TX17GP/W	TX17TP/B	TX16GP/W	TX16TP/W	TX16SP/W	TX17C/B	TX17C/L	TX16C/B	TX16C/W	TX15C/W
	⚠ 2001	1-478-583-23	$	&	AC ADAPTOR	●	●	●		●																					
	⚠ 2002	1-478-860-51	$	&	AC ADAPTOR						●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
⚠ [MA]	⚠	1-479-404-11	$	&	ADAPTOR, AC														●												
	⚠ 2003	A-1149-398-A	$	&	S BATTERY (J) (S)	●	●	●		●																					
	⚠	A-1149-399-A	$	&	S BATTERY (U) (S)						●	●	●	●	●	●	●															
⚠ [MA]	⚠	A-1149-400-A	$	&	S BATTERY (E/I/C) (S)													●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	⚠ 2004	A-1149-416-A	$	&	L BATTERY (J) (S)					●																					
⚠ [MA]	⚠ 2005	1-770-019-61		&	ADAPTOR, CONVERSION PLUG																●	●		●							
⚠ [MA]	⚠ 2006	1-827-945-21		&	CORD, POWER																●	●		●							
⚠ [MA]	⚠ 2007	1-827-947-21		&	CORD, POWER																						●	●	●	●	●
	⚠ 2008	1-790-732-81		&	CORD, POWER	●	●	●		●																					
	⚠ 2009	1-829-237-21		&	CORD, POWER						●	●	●	●	●	●	●														
⚠ [MA]	⚠ 2010	1-827-481-21		&	(English,German,French,Italian,Spanish)...POWER-SUPPLY CORD													●		●	●						●				
⚠ [MA]	⚠ 2011	1-827-946-31		&	(English)...CORD, POWER													●		●	●										
⚠ [MA]	⚠ 2012	1-830-375-11		&	(Russian)...POWER-SUPPLY CORD														●												
⚠ [MA]	⚠ 2014	1-830-518-21		&	POWER-SUPPLY CORD SET																		●			●					
⚠ [MA]	2015	8-954-048-93		&	HEADPHONE MDR-Q22LP/S2 SET																						●	●	●	●	●
	2016	A-1144-728-A			HEADSET(JP)					●																					
	-	2-652-626-01		&	Instruction Manual (XP Professional, XP Home Edition)	●		●		●																					
⚠ [MA]	-	2-652-627-01		&	Instruction Manual (XP Professional)		●																								
⚠ [MA]	-	1-816-429-12		&	(English)...PHONE PLUG (GB)													●		●	●										
	-	2-652-940-11		&	WELCOME MAT, 3250(U)(D)						●	●	●	●	●	●	●														
⚠ [MA]	-	2-654-119-01		&	(English,German,French,Italian,Spanish)...REGULATORY BOOKLET ML (D)													●		●	●										
⚠ [MA]	-	2-654-130-01		&	(Russian)...REGULATORY BOOKLET (RU) (D)														●												
⚠ [MA]	-	2-652-366-11		&	(English,German,French,Italian,Spanish)...SPECS ML 3250 (E)(D)													●		●	●										
⚠ [MA]	-	2-652-366-21		&	(Russian)...SPECS RU 3250 (E)(D)														●												
⚠ [MA]	-	2-654-113-01		&	(English,German,French,Italian,Spanish)...TROUBLE GUIDE ML MAJOR (D)													●		●	●										
⚠ [MA]	-	2-654-113-11		&	(English,Russian)...TROUBLE GUIDE ML MINOR (D)													●	●	●	●										
⚠ [MA]	-	2-652-332-11		&	SAFETY/REGULATIONS 2(G)(D)																	●	●	●	●	●	●				
⚠ [MA]	-	2-652-332-21		&	SAFETY/REGULATIONS 2(G)(D)																							●	●	●	●	●
⚠ [MA]	-	2-652-350-11		&	SPEC SHEET 3250(G)(D)																	●	●		●		●				
⚠ [MA]	-	2-652-350-31		&	SPEC SHEET 3250(G)(D)																							●	●	●	●	●
⚠ [MA]	-	2-652-350-41		&	SPEC SHEET 3250(G)(D)																		●			●					
⚠ [MA]	-	2-652-329-11		&	TROUBLESHOOTING GUIDE(G)(D)																	●	●		●		●				
⚠ [MA]	-	2-652-329-31		&	TROUBLESHOOTING GUIDE(G)(D)																							●	●	●	●	●
⚠ [MA]	-	2-652-329-41		&	TROUBLESHOOTING GUIDE(G)(D)																		●			●					
						⚠ [MA]					⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]	⚠ [MA]

- This parts list contains two different types of parts.
  The first type is the parts that are common to all models.
  The other type is the parts that are different depending on each model.
- As for the TX90PS, check the Page 4-2 of "How to identify the TX90PS" for TX90PS, then refer to the Parts list.
- この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。
- TX90PSは4-2ページの"TX90PSの判別方法"を確認してから、部品表をご参照ください。

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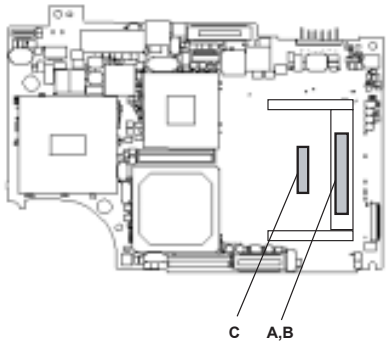
CHAPTER 5.
OTHERS

5-1. The Barcode Label

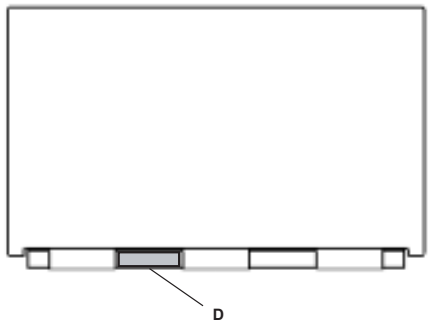
The hatched portion of the barcode label is used as the repair data.

バーコードラベルの網掛け部は，修理データとして使用いたします。

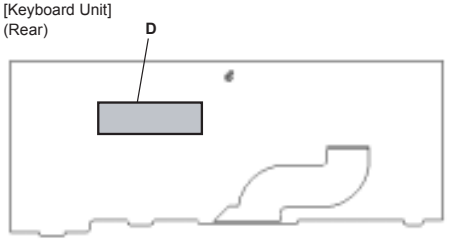
[MBX-138 Board]
(Side A)



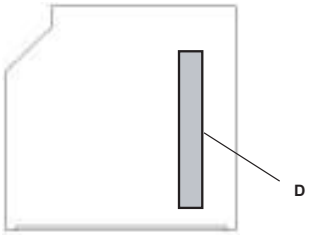
[LCD Unit]
(Front)



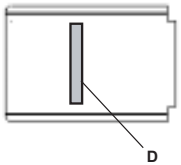
[Keyboard Unit]
(Rear)



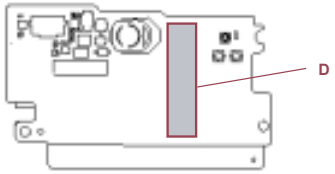
[Drive COMBO/RW/SM]
(Rear)



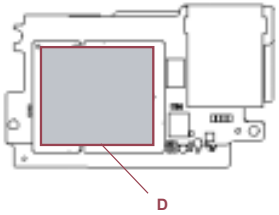
[HDD]
(Rear)



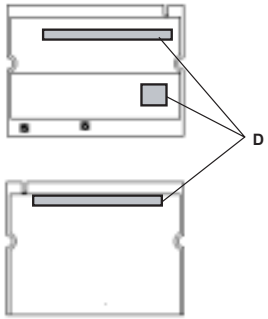
[WAN Module] ⚠2 [MA]
(Top)



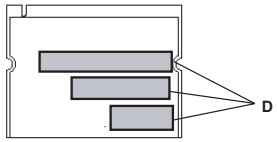
[WAN Module] ⚠2 [MA]
(Rear)



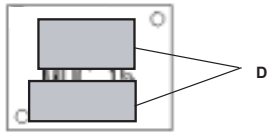
[W-LAN Card intel]



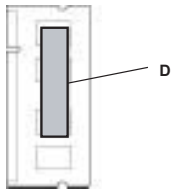
[W-LAN Card Atheros]



[MODEM Card]



[MEMORY]



A : Part No.
B : Serial No.
C : Revision No.
D : Product Code
E : Maker Barcode
F : Global User ID (iLink)
G : Mac Address
▭ : Barcode

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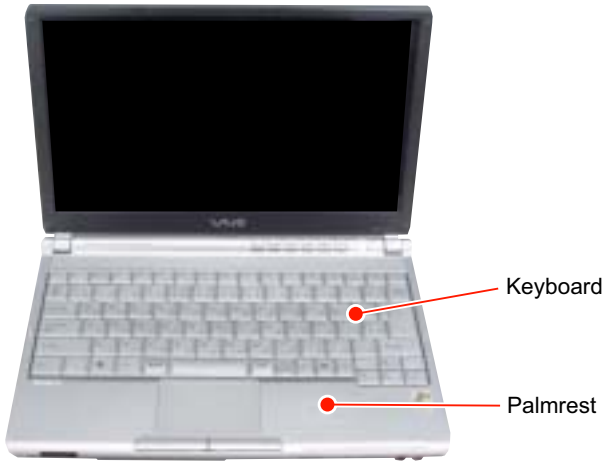
5-2. Precautions for Handling the Drive

In performing a repair, observe the following precautions.
修理の際には以下の注意事項を厳守してください。

① Do not turn the power switch on until the palmrest and the keyboard are installed completely.
① パームレストやキーボードを完全に取り付けるまでは電源を入れないでください。



② If the power switch is to be turned on with the set in disassembled state, be sure to load a dummy disc in the drive.
② 分解した状態で電源を入れる必要がある場合には〝必ず〟 ダミーのディスクをドライブにセットしておいてください。

③ If the power switch is to be turned on with the set in disassembled state for checking the drive condition, be sure to turn the power switch on with the tray drawn out.
③ 分解した状態で電源を入れ, ドライブの状態を確認する必要がある場合には〝必ず〟 トレイを引き出した状態で電源を入れてください。

Tray drawn-out state
トレイが引き出された状態

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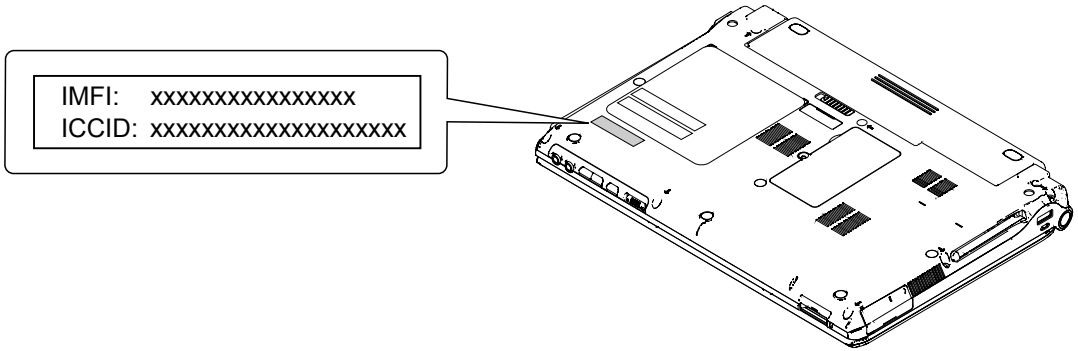
5-3. Note for WWAN Board Replacement ⚠2 [MA]

5-3. WWAN 基板交換時の注意

When replacing the WWAN Board (Ref. 556 A-1153-774-A WWAN UNIT (-31) (S)), change the barcode label on the bottom.

WWAN 基板 (Ref. 556 A-1153-774-A WWAN UNIT (-31) (S)) を交換した際には、ボトムのバーコードラベルの貼り替え作業を行ってください。

① Peel off the barcode label which is attached to the bottom. (Refer to the figure below.)
① ボトムに貼られているバーコードラベルをはがします。(下図参照)



② Attach the barcode label which is included with the WWAN Board
to the position where you peeled off the label in the step (1).
② WWAN基板に同梱されているバーコードラベルを①ではがした位置に貼ってください。

*There is no problem though the ICCID is not printed on
the substituted barcode label.
*貼り替えたバーコードラベルにはICCIDが印刷されていませんが問題ありません。

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VGN-TX50B/TX70PZ/TX90PS/TX90S (J)
VGN-TX610P/TX630P/TX650P/TX651P/TX670P/TX690P (AM)
VGN-TX1HP/TX1XP/TX1XRP (EU)
VGN-TX15C/TX16C/TX16GP/TX16SP/TX16TP/TX17C/TX17GP/TX17TP (AO)

List of VGN-TX Series (As of October, 2005)

Service Manual Parts No.	Model Name			
	J	AM	EU	AO
9-876-428-XX	VGN-TX50B/B	VGN-TX610P/B ☜	VGN-TX1HP/W	VGN-TX15C/W
	VGN-TX70PZ	VGN-TX630P/B ☜	VGN-TX1XP/B	VGN-TX16C/B
	VGN-TX90PS		VGN-TX1XP/L	VGN-TX16C/W
	VGN-TX90PS*	VGN-TX650P/B ☜	VGN-TX1XRP/B ☜	VGN-TX16GP/W ☜
	VGN-TX90S*	VGN-TX651P/B		
		VGN-TX670P/B ☜		VGN-TX16SP/W
		VGN-TX670P/W ☜		VGN-TX16TP/W ☜
		VGN-TX690P/L ☜		VGN-TX17C/B
				VGN-TX17C/L
				VGN-TX17GP/B ☜
				VGN-TX17GP/W ☜
				VGN-TX17TP/B ☜

* : CTO model
☜ : Additional model

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Revision History

Suffix	Ver.	Date	Contents	QM No.
-01	Ver. 1	2005.09.02	First Edition	
-02	Ver. 2	2005.09.29	⚠1 **Front Page (Model Lineup), Page 1-1, Page 1-2, Page 4-1, Page 4-4, Page 4-6, Page 4-8, Page 4-10, Page 4-11, Back Cover**	N-2005_047AK
-03	Ver. 3	2005.10.13	⚠2 **Front Page (Model Lineup), Page 1-1, Page 1-2, Page 3-1, Page 4-1, Page 4-3, Page 4-4, Page 4-5, Page 4-6, Page 4-7, Page 4-8, Page 4-9, Page 4-10, Page 4-11, Page 5-1, Page 5-3, Back Cover**	N-2005_059AK

<Remarks>

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